

REMARKS

Claims 1-20 are pending in the present application.

The claims are believed to be allowable for the reasons set forth herein. Notice thereof is respectfully requested.

Claim Rejections - 35 USC § 103

Claims 1-7, 16-18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto et al. in view of EP-0510754.

Matsumoto et al. was previously cited as a sole reference in rejecting claims 1-7 and 16-18. The rejection has been rendered moot by arguments leading to the current rejection based on Matsumoto et al. in view of EP-0510754. The deficiencies of Matsumoto et al. has been previously set forth in the response of September 5, 2003 and all arguments entered therein are applicable herein.

Matsumoto et al. is now combined with EP-0510754. Applicants respectfully submit that the teachings of EP-0510754 are improperly applied.

Matsumoto et al. is directed to a stimulable phosphor sheet wherein the image is stored and later released to be read by a

light collection means. The light is photoelectrically converted into image signals for digital processing.

EP-0510754 is directed to a luminescent article wherein the phosphor converts X-rays to longer wavelength visible radiation which is then immediately captured by a photographic film. A problem with such a device is loss of resolution due to poor contact between the film and phosphor screen. In some cases a gap is created between the film and screen. This gap is detrimental to resolution and is to be avoided. This problem is mitigated by creating an undulating surface.

The Office opines that the surface structure is to improve resolution. Applicants agree. In the case where film/screen contact is important an undulated surface capable of "bleeding" air from between the film and screen does improve resolution. If there is no film then there is no need to undulate the surface since the problem of film/screen contact does not exist. Therefore, the teachings of EP-0510754 provide no guidance regarding improving the resolution of a storage phosphor screen which has no film. One of skill in the art would have no motivation to combine Matsumoto et al. with EP-0510754 since

the problems to be solved are due to limitations which are unique to the imaging technique.

Absent teachings to the contrary one of skill in the art would not consider a solution suitable for improving film/screen contact in a storage phosphor system. This combination can only be made in hindsight based on the present invention and a rejection based thereon is improper.

Applicants respectfully submit that the rejection of claims 1-7, 16-18 and 20 under 35 U.S.C. 103(a) as being unpatentable over Matsumoto et al. in view of EP-0510754 is improper and removal is earnestly solicited.

Claims 1-3 and 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto et al. in view of European Patent EP 0510754 and in further view of Kuriyama et al.

Claims 1-3 and 11-15 were previously rejected based on Matsumoto et al. in view of Kuriyama et al. This rejection was rendered moot by the response filed September 5, 2003 and all arguments entered therein are applicable herein.

The same claims are now rejected by the inclusion of EP-0510754. Applicants respectfully submit that the combination of

references is not only improper but that the combined teachings are contrary to the presently claimed invention.

EP-0510754 describes providing a relief structure to allow air to "bleed" from between a film and screen as described previously. Even if this reference were considered in hindsight based on the present disclosure the teachings would not lead one of skill in the art to the claimed invention.

EP-0510754 describes, on page 2, the disadvantage of incorporating solid particles due to the "effect on abrasion resistance as these particles will be weared off". The Office contends that the combined teachings would lead one to incorporating particles while the art cited to support such a combination attempts to avoid such an inclusion.

In summary, EP-0510754 teaches surface undulation to improve film/screen contact without relying on particles in the layer. Matsumoto et al. and Kuriyama et al. do not employ a film and therefore the problem solved by EP-0510754 is irrelevant. Even then, EP-0510754 teaches contrary to the present invention and if incorporated, which can only be envisioned in hindsight, the reference teaches in a direction contrary to the claimed invention.

Applicants respectfully request that the rejection of claims 1-3 and 11-15 under 35 U.S.C. 103(a) as being unpatentable over Matsumoto et al. in view of EP-0510754 and in further view of Kuriyama et al. is improperly based on art which can only be combined in hindsight from a review of the present disclosure and, even then, is contrary to the claimed invention. Removal of the rejection is proper.

Claims 1-3 and 8-10 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto et al. in view of EP-0510754 and in further view of Van Havenbergh et al.

Claims 1-3 and 8-10 were previously rejected based on Matsumoto et al. in view of Van Havenbergh et al. This rejection was rendered moot by the response filed September 5, 2003 and all arguments entered therein are applicable herein.

Claims 1-3 and 8-10 are now rejected based on the further inclusion of EP-0510754. Applicants respectfully submit that this combination fails to render the claims obvious.

The lack of motivation for combining Matsumoto et al. and EP-0510754 is set forth previously and applies here equally.

Van Havenbergh fails to mitigate the deficiencies of the combination of Matsumoto et al. and EP-0510754.

Van Havenbergh et al. is specific to a primer layer between the phosphor and the support. The present invention is specific to the surface structure. The Applicants are at a loss to understand how the composition of the primer layer provides any guidance regarding the surface structure. Whether the primer layer of Van Havenbergh et al., or a different primer layer, is used is not at issue herein and a reference directed thereto provides no relevant guidance.

Applicants respectfully submit that the rejection of claims 1-3 and 8-10 under 35 U.S.C. 103(a) as being unpatentable over Matsumoto et al. in view of EP-0510754 and in further view of Van Havenbergh et al. is without merit since the inclusion of Van Havenbergh et al. provides teachings which are not relevant to the pending claims. Removal of the rejection is proper.

Claims 1 and 19 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto et al. in view of EP-0510574 further in view of Yamazaki et al.

Claims 1 and 19 were previously rejected based on Matsumoto et al. in view of Yamazaki et al. This rejection was rendered moot by the response filed September 5, 2003 and all arguments entered therein are applicable herein.

As discussed herein, EP-0510754 is specific to a phosphor screen for use with a film wherein surface undulations are used to "bleed" air from between the film and screen.

Yamazaki et al. is specific to a radiation image storage panel wherein a binder is taught for use therein. In col. 4, line 60, the phosphor layer is described to have a smooth surface.

The Office opines that one of skill in the art would be expected to arrive at the present claimed invention by combining these references with Matsumoto et al. Applicants respectfully submit that this combination is contrary to the teachings of Yamazaki et al. Furthermore, the Office is arguing that one of skill in the art would utilize surface undulations specifically described as suitable for decreasing air pockets between a film and a screen in an application without a film even though this is in direct conflict with teachings of a smooth surface in a storage phosphor apparatus. Applicants respectfully submit that

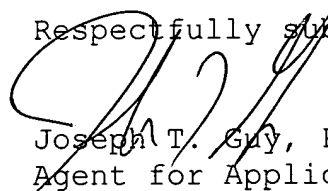
this combination is contrary to the art of record and the rejection should be removed.

Applicants respectfully submit that claims 1 and 19 are patentable over Matsumoto et al. in view of EP-0510574 and in further view of Yamazaki et al. and notice thereof is requested.

CONCLUSIONS

Claims 1-20 are pending in the present application. All claims are believed to be in condition for allowance. Notice thereof is respectfully requested.

Respectfully submitted,



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